

DRILLING AND TAPPING INSTRUCTIONS

Safety glasses must be worn.

DO NOT attempt to hold the bushings or rods in your hand or with your fingers.

The rods must be clamped in a vice.

The bushings must be held with locking pliers.

Use WD-40, LPS 2-26, or similar for drilling/tapping fluid.

#4-40 and M3-0.5 **Spiral Flute Taps** are recommended. These extract your chips while threading. They also are designed for power tapping, so advancing and back the tap out a quarter turn at a time is not required. One source for them is from LittleMachineShop.com, <http://lmscnc.com/6199> and <http://lmscnc.com/6192>.

Drill sizes for tapping:

#4-40-----#43 Drill

M3-0.5—2.5MM Drill

Square and deburr each end of the rods once they have been cut to length.

Clamp one end of the rod with about $\frac{3}{4}$ " of the rod exposed. Slide the **DRILL** bushing over the rod and ensure it is seated, approx. $\frac{1}{2}$ " on the rod. Hold the bushing with locking pliers and drill the hole approx. $\frac{3}{4}$ " deep, lubricating as needed. Clear the hole of all chips.

Slide the **TAP** bushing over the rod and ensure it is seated, approx. $\frac{1}{2}$ " on the rod. Hold the bushing with locking pliers. Liberally lubricate the hole and tap. Run the tap in until you get the thread engagement you desire. The bushing can be removed to allow an approx. $\frac{1}{4}$ " additional threads, after the initial $\frac{1}{2}$ " have been cut.